

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:

receiving by a client device, from a remote server, a plurality of display state definitions ~~correspondingly~~ defining a plurality of instantiations of an user interface of an application for a plurality of corresponding display states of the user interface, each display state definition having one or more display cell definitions correspondingly defining one or more display cells of an instantiation of the user interface, with each display cell definition defining content of the corresponding display cell, and at least one of the display cell definition having a transition rule defining for a next display state of the user interface to transition to, when a user interacts with the content of the display cell;

determining locally by the client device, a ~~next~~current display state of the user interface, based at least in part on the transition rule of a display cell definition of a display cell which content was interacted by the user; and

provisioning by the client device, a ~~current~~ next instantiation of said user interface in accordance with a ~~first~~ one or more of the display state definitions ~~corresponding to~~ associated with the determined ~~next~~current display state.

2. (Cancelled)

3. (Currently amended) The method of claim 12, wherein said provisioning comprises generating by said client device a ~~first~~ display cell of the ~~next~~current instantiation of the user interface in accordance with a ~~first of said one or more~~ display cell definitions of one of said first one or more display state definitions associated with said next display state.

4. (Currently amended) The method of claim 3, wherein said provisioning further comprises generating by said client device ~~another second~~ display cell of the ~~nextcurrent~~ instantiation of the user interface in accordance with ~~another second of said one or more~~ display cell definitions of the same or another of said one or more first display state definitions associated with said next display state.

5. (Currently amended) The method of claim 1, wherein said provisioning comprises generating by said client device a portion of the ~~nextcurrent~~ instantiation of the user interface with constituting contents inherited from a pseudo instantiation of the user interface.

6. (Previously Presented) The method of claim 1, wherein said current display state is multi-dimensional.

7. (Previously Cancelled)

8. (Previously Cancelled)

9. (Previously Cancelled)

10. (Currently Amended) A method comprising:

provisioning locally by a client device a first instantiation of a user interface of an application for a current display state of the user interface in accordance with ~~a first one or more~~ display state definitions defining the first instantiation of the user interface for said current display state of the user interface, each of said first one or more display state definitions including one or more display cell definitions correspondingly defining one or more display cells of the first instantiation of the user interface, with at least one of the one or more display cell

definitions having a transition rule defining a next display state to transition to, when the content of the display cell is interacted by a user;

determining locally by said client device that the a next display state offer the user interface to be said next display state based on a user's interaction with the content of thea display cell of the first instantiation of the user interface, and in accordance with said corresponding display cell definition of ~~said first display state definition~~ defining the display cell, ~~the display cell definition including at least one state transition rule specifying a next display state of the user interface to be transitioned to, for an user interaction with the display cell of the user interface;~~ and

provisioning by the client device thea next instantiation of the user interface corresponding to the determined next display state of the user interface, in accordance with a second one or more display state definitions, separate and distinct at least partially from said first one or more display state definitions, defining the next instantiation of the user interface.

11. (Currently Amended) A method comprising:

transmitting by a server to a remote client device, ~~a first~~ one or more display state definitions defining a corresponding first instantiation of the a user interface of an application for a first display state of the user interface, each of the first one or more display state definitions including first one or more display cell definitions correspondingly specifying first constituting contents for a first plurality of one or more display cells of the first instantiation of the user interface, with at least one of the first one or more display cell definitions including a first transition rule specifying a first next display state to transition to, when a user interacts with the content of the corresponding display cell;

transmitting by the server to said remote client device, said first constituting contents for said first ~~plurality of one or more~~ display cells for rendering said first instantiation of said user interface on said remote client device in accordance with said first one or more display state definitions;

transmitting further in advance by the server to said remote client device, ~~a second one or more display state definitions, separate and distinct at least partially from said first one or more display state definitions, defining a corresponding second instantiation of the user interface for a second display state of the user interface, each of said second one or more display state definitions having second one or more display cell definitions specifying second constituting contents for a second plurality of one or more display cells for the second instantiation of the user interface, with at least one of the second one or more display cell definitions including a second transition rule specifying a second next display state to transition to, when a user interacts with the content of the corresponding display cell~~ the second display state being resulted from a first user interaction with said first instantiation of the user interface; and

transmitting further in advance by the server to said remote client device, said second constituting contents for said second ~~plurality of~~ one or more display cells for rendering said second instantiation of said user interface on said remote client device in accordance with said second one or more display state definitions.

12. (Currently amended) The method of claim 11, wherein the method further comprising:
transmitting by the server to said remote client device, third constituting content of a pseudo instantiation of said user interface to be inherited during at least a selected one of said rendering, ~~in accordance with a corresponding one of said first and second display state definitions.~~

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) An article of manufacture ~~product~~ comprising:
a storage medium; and

~~a first plurality of programming instructions stored in the storage medium and configured to implement a user interface provision function equipped to determine a current display state for a user interface of an application, and to provision a current instantiation of said user interface in accordance with a first of a plurality one or more display state definitions ~~correspondingly defining a first of a plurality of instantiations of the user interface corresponding to associated~~ with the determined current display state, to determine a next display state for the user interface in accordance with a transition rule of a display cell definition of a display state definition, the display cell definition further defining content of a display cell interacted by an user-interaction ~~with the current instantiation of the user interface and a first state transition rule of the first display state definition, and to provision a next instantiation of said user interface in accordance with a second of the plurality one or more display state definitions, separate and distinct at least partially from the first one or more display state definitions, ~~correspondingly defining a second of the plurality of next~~ instantiations of the user interface corresponding to the determined next display state; and,~~~~

~~a second plurality of programming instructions implementing at least one other product function.~~

16. (Previously Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Currently amended) The product article of claim 15, wherein said ~~first~~ programming instructions equip said user interface provision function to perform said provisioning of the current instantiation of the user interface, by generating a portion of the current instantiation of

the user interface with constituting contents inherited from a pseudo instantiation of the user interface.

20. (Currently amended) The ~~product~~article of claim 15, wherein said current display state is multi-dimensional.

21. (Currently amended) The ~~product~~article of claim 15, wherein the ~~product~~ user interface provision function is a part of a selected one of a browser and an operating system.

22. (Previously Cancelled)

23. (Previously Cancelled)

24. (Previously Cancelled)

25. (Currently Amended) An article of manufacture~~product~~ comprising:
a storage medium; and
a first plurality of programming instructions stored in the storage medium and configured
to implement a user interface provision function equipped to provision a first instantiation of a user interface of an application in accordance with a first one or more display state definitions defining the a first instantiation of the user interface corresponding to a current display state of the user interface, to determine a next display state of the user interface based on a transition rule of a display cell definition which also defines content of a display cell of the first instantiation of the user interface a user's interaction edion with ~~a portion of the first instantiation of the user interface~~ and in accordance with said first display state definition, which include state transition rules specifying display states to be transitioned to, in the event of various user interactions, and to provision a next instantiation of the user interface in accordance with a second one or more

display state definitions, separate and distinct at least partially from the first display state definition, defining the next instantiation of the user interface corresponding to the next display state of the user interface; and,

~~a second plurality of programming instructions to implement at least one other product function.~~

26. (Currently amended) An application server comprising:

a processor; and

a plurality of programming instructions executed by the processor to implement a user interface provision function equipped to transmit to a remote client device,

~~a first one or more display state definitions specifying constituting contents for a first plurality of display cells of a first instantiation of an user interface of an application corresponding to a first display state of the user interface, each of the first one or more display state definitions having first one or more display cell definitions correspondingly defining first constituting contents of first one or more display cells of the first instantiation of the user interface, with at least one of the display cell definition further having a transition rule specifying a second display state to transition to, when a user interacts with the contents of the corresponding one of the first one or more display cells, and~~

~~and said first constituting contents for said first plurality of display cells for rendering said first instantiation of the user interface on said remote client device in accordance with said first one or more display state definitions,~~

~~and wherein the user interface provision function is further equipped to transmit~~

~~further in advance to said remote client device, a second one or more display state definitions, separate and distinct at least partially from the first one or more display state definitions, specifying second constituting contents for a second plurality of display cells of a second instantiation of the user interface~~

corresponding to a second display state of the user interface, to be rendered in response to a user interaction with the content of said first display cell of said first instantiation of the user interface, each of the second one or more display state definitions having second one or more display cell definitions correspondingly defining second constituting contents of second one or more display cells of the second instantiation of the user interface, with at least one of the second one or more display cell definitions further having a transition rule specifying the first or a third display state to transition to, when a user interacts with the contents of the corresponding one of the second one or more display cells, and said second constituting contents for said second plurality of display cells for rendering said second instantiation of the user on said remote client device in accordance with said second display state definition in the event said ~~first~~ user interaction occurs.

27. (Previously presented) The application server of claim 26, wherein the plurality of programming instructions further equip the user interface provision function to be able to transmit to said remote client device, constituting content of a pseudo instantiation of said user interface to be inherited in at least a selected one of said rendering of said first and said second instantiation of said user interface.

28. (Cancelled)

29. (Cancelled)

30. (Currently amended) A client device comprising:
a storage medium having stored therein a plurality of programming instructions to implement a user interface provision function equipped to receive from a remote server a

~~plurality of one or more~~ display state definitions ~~correspondingly defining a plurality of first~~ instantiations of an user interface of an application corresponding to a ~~plurality of~~ display states of the user interface, each of the one or more display state definitions having one or more display cell definitions correspondingly defining constituting contents of one or more display cells of the instantiation of the user interface, with at least one of the one or more display cell definitions further having a transition rule specifying a next display state to transition to, when a user interacts with the contents of the corresponding display cell, determine a ~~current-next~~ display state of the user interface, and to provision a ~~next~~current instantiation of said user interface in accordance with a ~~first of said~~ second one or more display state definitions ~~corresponding to associated with~~ the determined ~~current-next~~ display state of the user interface; and

a processor coupled to the storage medium to execute the programming instructions.

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Currently amended) The client device of claim 30, wherein said programming instructions equip said user interface provision function to perform said provisioning of the current instantiation of the user interface, by generating a portion of the ~~first~~current instantiation of the user interface with constituting contents inherited from a pseudo instantiation of the user interface.

35. (Previously Presented) The client device of claim 30, wherein said current display state is multi-dimensional.

36. (Previously Presented) The client device of claim 30, wherein the client device is a device selected from a group consisting of a wireless telephone, a palm sized computing device, and a notebook sized computing device.

37. (Previously Cancelled)

38. (Previously Cancelled)

39. (Previously Cancelled)

40. (Currently amended) A client device comprising:

a storage medium having stored therein a plurality of programming instructions to implement a user interface provision function equipped to provision a first instantiation of a user interface corresponding to a first display state in accordance with a first one or more display state definitions defining the first instantiation of a user interface, to determine a next display state of the user interface based on a user's interaction with content of a first display cell ~~portion~~ of the first instantiation of the user interface and in accordance with a transition rule of a first display cell definition of one of said first one or more display state definitions, the first display cell definition defining said content of the first display cell, and ~~which includes state~~ the transition rules specifying a next display states of the user interface to be transitioned to, in the event of ~~various corresponding~~ user interactions with the content of the first display cell, and to provision a next instantiation of the user interface corresponding to the next display state in accordance with a second one or more display state definitions, separate and distinct at least partially from said first one or more display state definitions, defining the second instantiation of the user interface; and

a processor coupled to the storage medium to execute the programming instructions.

41. (Currently amended) A server comprising:

a storage medium having stored therein a plurality of programming instructions to implement a user interface provision function equipped to transmit to a remote client device, a first display state definition having at least a first display cell definition specifying first constituting contents for a first ~~plurality of~~ display cells of a first instantiation of a user interface while the user interface in a first display state, and the first constituting contents for said first ~~plurality of~~ display cells for rendering said first instantiation of the user interface on said remote client device in accordance with at least said first display state definition, the first display cell further having a transition rule specifying a second display state to transition to, when a user interacts with the content of the first display cell, and to transmit further in advance to said remote client device, a second display state definition, separate and distinct at least partially from said first display state definition, specifying second constituting contents for a second ~~plurality of~~ display cells of a second instantiation of the user interface corresponding to a second display state of the user interface to be rendered in response to a first user interaction with the content of said first display cell of said first instantiation of the user interface leading to the second display state of the user interface, and said second constituting contents for said second plurality of display cells for rendering said second instantiation of the user interface on said remote client device in accordance with at least said second display state definition in the event said first user interaction occurs; and

at least one processor coupled to the storage medium to execute the programming instructions.

42. (Previously Presented) The server of claim 41, wherein the plurality of programming instructions further equip the user interface provision function to transmit to said remote client device, constituting content of a pseudo instantiation of said user interface to be inherited in at least a selected one of said rendering of said first and said second instantiations of said user interface.

43. (Cancelled)

44. (Cancelled)